

Here's a more technical breakdown of the functional hierarchy, formatted as it would appear in a Scope of Work (SOW) document:

Scope of Work: Wellness and Prevention Mobile Application for Student Athletes

1. Student Athlete Role

1.1 Account Management

- **1.1.1 Login/Signup:**
 - Implement secure authentication using industry-standard protocols (e.g., OAuth 2.0, JWT).
 - Integrate with email verification services for account confirmation.
 - Provide password reset functionality with email-based recovery.
 - Offer optional social media login integration (e.g., Google, Facebook).
 - Design a user-friendly profile creation process, allowing users to input basic information and manage privacy settings.
- **1.1.2 Profile Management:**
 - Enable users to update personal information (name, email, etc.).
 - Allow users to change their password securely.
 - Provide granular control over privacy settings for data sharing.
 - Implement optional linking to external accounts (e.g., fitness trackers).

1.2 Dashboard

- **1.2.1 Personalized Content:**
 - Develop a dynamic content delivery system that displays relevant information based on user preferences, sport, and progress.
 - Implement a goal-setting and progress tracking system with visual representations (e.g., progress bars, charts).
 - Integrate a library of educational resources (articles, videos) with search and filtering capabilities.
 - Utilize machine learning algorithms to provide personalized recommendations for content and resources.
- **1.2.2 Activity Tracking:**
 - Develop a robust activity logging system for workouts, training sessions, and physical activity.
 - Integrate with wearable devices or GPS tracking for automatic data capture (optional).
 - Allow users to manually log activities with detailed information (duration, intensity, etc.).
 - Implement a sleep tracking feature with analysis and insights.
 - Provide tools for tracking nutrition and hydration with customizable goals.
 - Visualize data through interactive charts and graphs for easy understanding.
- **1.2.3 Wellness Tools:**
 - Integrate guided breathing exercises and mindfulness techniques.
 - Provide access to mental health resources (hotlines, support groups) with contact information.
 - Offer educational content on substance misuse prevention.
 - Develop a system for connecting users to local and national resources.

1.3 Community Features

- **1.3.1 Social Interaction:**
 - Implement a secure messaging system for communication between student athletes.
 - Allow users to share progress and achievements with their network.
 - Create forums and discussion boards for topic-specific conversations.
 - Enable users to join groups based on interests or sports.
- **1.3.2 Challenges and Competitions:**
 - Develop a system for creating and participating in challenges and competitions.
 - Implement a leaderboard system to track progress and rankings.
 - Award points, badges, and other rewards for participation and achievement.

1.4 Notifications and Reminders

- **1.4.1 Personalized Notifications:**
 - Send timely reminders for workouts, training sessions, and goals.
 - Notify users about new content, resources, and community activities.
 - Implement a system for customizing notification frequency and content.
- **1.4.2 Push Notifications:**
 - Enable/disable push notifications for different categories.
 - Allow users to customize notification settings based on their preferences.

1.5 Data and Privacy

- **1.5.1 Data Collection:**
 - Collect user data (activity, sleep, nutrition, etc.) securely and ethically.
 - Implement data anonymization and aggregation techniques for reporting purposes.

- **1.5.2 Data Privacy:**
 - Ensure compliance with data privacy regulations (GDPR, CCPA).
 - Develop a comprehensive privacy policy that is clear and concise.
 - Provide users with granular control over their data access and sharing.

2. Coach/Athletic Director Role

2.1 Account Management

- **2.1.1 Login/Signup:**
 - Implement secure authentication using industry-standard protocols.
 - Integrate with email verification services for account confirmation.
 - Provide password reset functionality with email-based recovery.
 - Design a user-friendly profile creation process, allowing coaches to input basic information and team affiliation.
- **2.1.2 Profile Management:**
 - Enable coaches to update personal information.
 - Allow coaches to change their password securely.
 - Provide tools for managing team settings (name, logo, etc.).

2.2 Dashboard

- **2.2.1 Team Management:**
 - Develop a system for viewing team rosters and athlete profiles.
 - Implement role-based access control to manage athlete permissions.
 - Integrate a secure messaging system for communication with athletes.
- **2.2.2 Progress Tracking:**
 - Provide tools for monitoring athlete progress on goals and challenges.
 - Display aggregated data for the team with visual representations.
 - Implement features for identifying areas for improvement and providing feedback.
- **2.2.3 Resource Management:**
 - Allow coaches to access and share educational resources with athletes.
 - Enable coaches to create custom content for the team.
 - Provide tools for managing team-specific challenges and competitions.

2.3 Data and Reporting

- **2.3.1 Data Visualization:**
 - Develop interactive charts and graphs for visualizing team data.
 - Generate reports on athlete progress and performance with customizable filters.
- **2.3.2 Data Export:**
 - Allow coaches to export data for analysis and reporting in various formats (e.g., CSV, PDF).

2.4 Communication and Collaboration

- **2.4.1 In-App Messaging:**
 - Implement a secure messaging system for communication with athletes individually or as a group.
 - Enable coaches to send announcements and updates to the team.
- **2.4.2 External Integration:**
 - Explore integration with existing team management platforms (optional).

3. DSCYF/DPBHS Staff Role

3.1 Account Management

- **3.1.1 Login/Signup:**
 - Implement secure authentication using industry-standard protocols.
 - Integrate with email verification services for account confirmation.
 - Provide password reset functionality with email-based recovery.
 - Design a user-friendly profile creation process, allowing staff to input basic information and assign roles.
- **3.1.2 Profile Management:**
 - Enable staff to update personal information.
 - Allow staff to change their password securely.
 - Provide tools for managing user permissions and access levels.

3.2 Content Management

- **3.2.1 Resource Library:**
 - Develop a secure content management system for uploading and managing educational resources.

- Implement a tagging and categorization system for easy search and retrieval.
- Provide role-based access control to manage resource permissions.
- **3.2.2 Local Resource Integration:**
 - Create a system for adding and managing links to local resources.
 - Implement a process for updating local resource information.
- **3.2.3 Custom Content Creation:**
 - Develop a content creation tool for staff to create and publish custom content.
 - Implement a content approval workflow for ensuring quality and accuracy.

3.3 Data and Reporting

- **3.3.1 Data Analytics:**
 - Implement a data analytics platform for viewing aggregated data on app usage and impact.
 - Generate reports on user engagement, outcomes, and trends.
 - Utilize data analysis techniques to identify areas for improvement.
- **3.3.2 Data Export:**
 - Allow staff to export data for analysis and reporting in various formats.

3.4 App Administration

- **3.4.1 User Management:**
 - Develop a user management system for creating and managing accounts.
 - Implement role-based access control for assigning permissions.
 - Monitor user activity and track login attempts.
- **3.4.2 App Settings:**
 - Provide tools for configuring app settings (notifications, privacy, etc.).
 - Implement a system for managing app updates and releases.

4. Potential Additional Roles

- **4.1 Parents/Guardians:**
 - **4.1.1 Login/Signup:**
 - Implement secure authentication using industry-standard protocols.
 - Integrate with email verification services for account confirmation.
 - Provide password reset functionality with email-based recovery.
 - Design a user-friendly profile creation process, allowing parents to input basic information and link to their child's account.
 - **4.1.2 Dashboard:**
 - Provide parents with a dashboard to view their child's progress on goals and challenges.
 - Allow parents to access educational resources.
 - Implement a notification system to inform parents about their child's activity.
 - **4.1.3 Communication:**
 - Enable parents to communicate with their child through in-app messaging.
 - Provide a system for receiving updates from coaches and DSCYF/DPBHS staff.
- **4.2 School Administrators:**
 - **4.2.1 Login/Signup:**
 - Implement secure authentication using industry-standard protocols.
 - Integrate with email verification services for account confirmation.
 - Provide password reset functionality with email-based recovery.
 - Design a user-friendly profile creation process, allowing administrators to input basic information and link to their school.
 - **4.2.2 Dashboard:**
 - Provide administrators with a dashboard to view aggregated data on student usage and impact.
 - Implement tools for managing student accounts and permissions.
 - Allow administrators to access reports on student progress and performance.

5. Technical Requirements

- **5.1 Platform:**
 - Develop the app for both iOS and Android platforms.
- **5.2 Development Language:**
 - Utilize a suitable programming language (e.g., Swift, Kotlin) for cross-platform development.
- **5.3 Database:**
 - Implement a secure and scalable database (e.g., MySQL, PostgreSQL) to store user data.
- **5.4 API Integration:**
 - Integrate with external APIs for features like fitness tracking, social media login, and data analysis.
- **5.5 Security:**
 - Implement robust security measures to protect user data and prevent unauthorized access.
- **5.6 Scalability:**

- Design the app to handle a large number of users and data.
- **5.7 Performance:**
 - Optimize the app for fast loading times and smooth user experience.
- **5.8 Accessibility:**
 - Ensure the app is accessible to users with disabilities.
- **5.9 Testing:**
 - Conduct thorough testing to ensure the app's functionality, performance, and security.

6. Project Management

- **6.1 Agile Methodology:**
 - Utilize an agile development methodology for iterative development and continuous improvement.
- **6.2 Communication:**
 - Establish clear communication channels between the development team and stakeholders.
- **6.3 Reporting:**
 - Provide regular progress reports and updates to stakeholders.

7. Deliverables

- **7.1 Mobile Application:**
 - Deliver a fully functional mobile application for both iOS and Android platforms.
- **7.2 Documentation:**
 - Provide comprehensive documentation for the app, including user manuals, technical specifications, and API documentation.
- **7.3 Training:**
 - Provide training to DSCYF/DPBHS staff on app administration and content management.

8. Timeline

- **8.1 Development:**
 - Define a realistic development timeline based on the app's complexity and features.
- **8.2 Testing:**
 - Allocate sufficient time for testing and quality assurance.
- **8.3 Deployment:**
 - Establish a deployment plan for releasing the app to the target audience.

9. Payment Terms

- **9.1 Payment Schedule:**
 - Define a payment schedule based on project milestones and deliverables.
- **9.2 Payment Method:**
 - Specify the preferred payment method (e.g., wire transfer, ACH).

This detailed SOW provides a comprehensive overview of the project scope, technical requirements, and deliverables. It serves as a roadmap for the development team and ensures clear expectations between all parties involved.